

Inclusion criteria

1. Age between 16 – 24 years old (inclusive)
2. Type 1 diabetes, as defined by WHO for at least 1 year or is confirmed C-peptide negative
3. HbA1c 7.5 – 14.0% based on analysis from local laboratory or equivalent within 1 months of enrolment
4. Treated with insulin pump or MDI
5. Has a Smart phone compatible with Dexcom G6
6. Willingness to wear study devices
7. Willing to follow study specific instructions
8. Literate in English

Exclusion criteria

1. Non-type 1 diabetes mellitus including those secondary to chronic disease
2. Any other physical or psychological disease likely to interfere with the normal conduct of the study
3. Untreated celiac disease or hypothyroidism
4. Current or planned users of real-time or flash (Libre) glucose monitoring sensors
5. Current treatment with drugs known to interfere with glucose metabolism, e.g. systemic corticosteroids, Metformin, SGLT2 inhibitors, GLP-1 agonists, non-selective beta-blockers and MAO inhibitors etc.
6. Regular use of acetaminophen
7. Medically documented allergy towards the adhesive (glue) of plasters or unable to tolerate tape adhesive in the area of sensor placement
8. Serious skin diseases (e.g. psoriasis vulgaris, bacterial skin diseases) located at places of the body, which could potentially be used for localisation of the glucose sensor)
9. Lack of reliable telephone facility for contact
10. Known or suspected allergy against insulin
11. Severe visual impairment
12. Severe hearing impairment
13. Subject not proficient in English